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65-65251

5 November 1965

**MEMORANDUM FOR: Deputy Director for Science & Technology**

1. OSI's memo of 28 October concerning capabilities in thought detection (DD/S&T # 5070-65) is being sent on to the DCI through the DDCI. The memo answers the DCI's query by explaining that there is no concerted program anywhere in the U. S. in the fields of myography and thought detection. I think it's a sure bet that DCI will want to be advised as to the feasibility of the Agency's developing plans for work in these areas. The memo does not cover this aspect.

2. Could you please serve as a broker and check with DD/P and DD/S to see if we might want to go down this road.

H. Knoche

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Enclosure Registry

65-6525

DD/ST# 5070-65

28 OCT 1965

**MEMORANDUM FOR:** Director of Central Intelligence

**THROUGH:** Deputy Director for  
Science and Technology

**SUBJECT:** Soviet Capabilities in  
Thought Detection

**REFERENCE:** Exec. Reg. No. 65-5327

1. This memorandum is for your information and is responsive to your question concerning the Agency and U.S. programs in this field.

2. We have completed a check of Agency components and U.S. installations most likely interested in the problem of myography and thought detection. To our knowledge there is no concerted program in progress in this field anywhere in the United States or the Agency.

3. The Agency components and U.S. installations contacted are listed in attachments 1 and 2. Research which may be remotely related to the subject is described briefly in these attachments. A summary of a conference with Dr. Richard L. Masland at the National Institutes of Health is given in attachment 3.

4. Analysts of the Life Sciences Division/OSI will continue to monitor the subject field, and we shall apprise you of any major Soviet developments in the area.

Signed:

**DONALD F. CHAMBERLAIN**  
Director of Scientific Intelligence

**Attachments:**

1. List of U.S. Agencies  
Contacted
2. List of Agency Components  
Contacted
3. Summary of Discussion  
with Dr. Masland

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GROUP 1  
Excluded from automatic  
downgrading and  
declassification

DD/ST

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**ATTACHMENT 1**

**LIST OF U.S. AGENCIES CONTACTED**

**National Aeronautics and Space Administration**  
**Science Information Exchange (Smithsonian Institution)**  
**Defense Documentation Center**  
**National Library of Medicine**  
**National Institutes of Health**

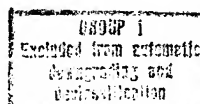
**RELATED RESEARCH**

A scan of the projects supported by the U.S. agencies indicates no organized program for the study of speech-thought mechanisms.

Isolated projects are concerned with electromyographic and other physiological measures intended for evaluation of pathological types of speech, subvocalization problems in reading, patterns of behavior in the laryngeal muscles of patients after surgery and with laryngeal diseases, glottal closure as a feature in phonetic distinction, and in studies relating phonation to respiratory phenomena.

Technological advances are also being made with phonetic decoders and diagnostic tools for clinical laryngology and voice pathology. Artificial palates for continuous analysis of speech and cineradiographic methods have been developed for recording films of speech sounds. Computers have been introduced in studies organized to test accuracies in the means for identifying vowels and consonants when information about their context is used.

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**ATTACHMENT 2**

**LIST OF AGENCY COMPONENTS CONTACTED**

Office of Medical Services/DDS  
 Technical Services Division/DDS  
 Office of Security/DDS  
 Office of Research and Development/DDS&T

**RESEARCH OR INFORMATION  
 POSSIBLY RELATED**

There have been two documents noting the weaknesses in the usual methods adopted in the United States for lie detection, and one document noting a Soviet capability which appeared to be more objective but also more laborious and expensive. They are:

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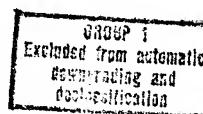
[redacted]. "Soviet Behavioral Research Methods and an Approach to Lie Detection," SID 61-17, 21 Aug 61.

Orlansky. "An Assessment of Lie Detection Capability," UBG 62-641, 31 Jul 62.

Kubis, J. F. "Studies in Lie Detection," AF 30(602)-2270, Project #5534, Task #553401, Jan 62.

The project sponsored by ORD entitled "Identification of Covert Oral and Non-oral Language Responses" is the only on-going research that could conceivably be applicable to the problem. In this study, microphone pick-ups are being obtained from children engaged in both oral and silent speech. Microphone placements are made in the laryngeal region and in front of the lips. It is hoped that electrodes may be placed upon the tongue, lips, and chin in order to record myograms from active muscle performance. There are no results of consequence to be reported from this project to date.

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**ATTACHMENT 3**

**SUMMARY OF DISCUSSION WITH DR. MASLAND**

Dr. Masland stated that he had attended the XIII Congress of the International Association of Logopedics and Phoniatrics in Vienna, 28-30 August 1965. He was not present for a number of the sessions due to interruptions for associated business and conferences.

Dr. Masland was generally knowledgeable in the area of linguistics, speech behavior, neurological disturbance and speech defects, and myography as applied to speech technology. Nothing bearing upon the subject of our interest was noted by Dr. Masland.

He volunteered that Mrs. Masland, who has an extensive working knowledge of speech research and technology, would be questioned since she attended most of the Congress sessions.

Dr. Masland will attend the meeting of the Samuel T. Orton Society in New York on 28 and 29 October 1965 which will cover numerous aspects of human communication. He was given several oral requirements which he agreed to accept and to relay his impressions to us.

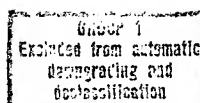
**Conference attendants:**

**Dr. Richard L. Masland**



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